

REMARKS

The present application includes claims 1-8, 10-27, 33-37, 41-43, 45, 48, 51-52, 55-60, 62, 66-73, 79-82 and 88-99.

Claims 1, 7, 45 and 62 are currently amended. Claim 1 was amended to have all acts infringed by the server without requiring infringement by the clients. Claim 7 was amended to conform to the language of amended claim 1. Claims 45 and 62 were amended to correct dependencies. These amendments do not substantially change the scopes of the claims and are not related to 102 or 103 rejections.

Independent claim 1

Claims 1, 2, 4-9, 10-12, 14, 19-22, 24-27, 33-36, 91-93, 97 and 98 stand rejected under 35 USC 103(a) as being unpatentable over Xu et al. (US patent publication 2006/0166653) in view of Amlekar (US patent 7,289,500).

Claims 3, 13, 15-18, 23 and 96 stand rejected under 35 USC 103(a) as being unpatentable over Xu et al. (US patent publication 2006/0166653) in view of Amlekar (US patent 7,289,500) and further in view of Aoki (US patent 6,563,822).

Claim 1 requires transmitting a data file, from a data server, on the one or more multicast channels, without the data server receiving acknowledgements from the receivers on whether they received the notification.

As acknowledged by the Examiner, Xu does not teach transmitting a notification without receiving acknowledgements. As to Amelkar, the Examiner referred to col. 2, line 37. This paragraph of Amelkar, however, relates to acknowledgement of reception of the file and not acknowledgement of the notification. These issues are totally different. A mobile station that is known to have received the notification will nearly surely receive at least part of the file, as it generally includes thousands of packets and therefore if it does not request retransmission of parts of the file it can be assumed that it received the entire file, as stated by Amelkar on col. 3, lines 37-40. But if the mobile station did not receive the notification on the multicast transmission, it may not have received any data at all as it will not know about the multicast channel and/or time and will not tune to receive the multicast transmission at all. According to claim 1, the risk of receivers not receiving the notification is taken, at the expense of more late deliveries than if acknowledgments of the notifications were received. This is not taught or suggested by Xu or Amelkar, alone or in combination.

The dependent claims are patentable at least because they depend on patentable independent claims.

Independent claim 37

Claims 37, 41-43, 48, 51, 52 and 55 stand rejected under 35 USC 102(b) as being anticipated by Xu et al. (US patent publication 2006/0166653).

Applicant respectfully traverses the rejection and respectfully submits that the Examiner has not established a *prima facie* case of anticipation, as at least one limitation of claim 37 is not taught by Xu.

Claim 37 requires “receiving at least one key required for decrypting the at least one packet after receiving a sufficient number of packets for reconstructing the data file”.

The Examiner referred to paragraphs [0069], [[0070], [0071] and [0072] regarding this requirement, stating that “a mobile station needs a key to unlock an encrypted packet”. Applicant acknowledges that a key is required to decipher encrypted data. Applicant notes, however, that Xu does not teach or suggest in these paragraphs, or anywhere else that applicant is aware of, that at least one key is received after a sufficient number of packets for reconstructing the data file are received, as required by claim 37. In fact, paragraph [0074] of Xu seems to imply that the key is received at the beginning of the multicast session, before the data which needs to be decrypted is received.

The dependent claims are patentable at least because they depend on patentable independent claims. Nonetheless, at least some of the dependent claims add patentability over independent claim 37.

Claim 41, for example, requires: “requesting the at least one key after receiving a sufficient number of packets for reconstructing the data file. Xu does not teach or suggest requesting a key after receiving the sufficient number of packets. Paragraph [0069] to which the Examiner referred relates to a radio network controller (RNC) (not a mobile station!) that needs to request MAC keys. This paragraph and Xu in general does not teach or suggest requesting after receiving a sufficient number of packets.

Claim 42, for example, requires that wherein the requesting of the at least one key is performed responsive to a user instruction. Applicant could not find any mention of a user in paragraphs [0072] and [0073] referred to by the Examiner.

Claim 43, for example, requires that at least a portion of the data file is not encrypted and the user instruction is received after displaying the non-encrypted portion of the file to the user. Xu does not suggest that a data file has both an encrypted and a non-encrypted portion. Neither does Xu mention displaying the non-encrypted portion and only then receiving a user instruction.

Claim 45, for example, requires that the non-encrypted portion of the file is received before any encrypted portion of the data file. The Examiner has not provided a rejection regarding this claim.

Independent claim 56

Claims 56-57 and 60 stand rejected under 35 USC 102(b) as being anticipated by Xu et al. (US patent publication 2006/0166653).

Claims 58, 59 and 62 stand rejected under 35 USC 103(a) as being unpatentable over Xu et al. (US patent publication 2006/0166653) in view of Amlekar (US patent 7,289,500).

Applicant respectfully traverses the rejection and respectfully submits that the Examiner has not established a *prima facie* case of anticipation or obviousness, as at least one limitation of claim 56 is not taught by Xu.

Claim 56 requires “providing at least one of the plurality of receivers with one or more decryption keys ... after the file was transmitted”.

As mentioned regarding claim 37, Xu does not teach or suggest that keys are provided after the file was transmitted.

The dependent claims are patentable at least because they depend on patentable independent claims. Nonetheless, at least some of the dependent claims add patentability over independent claim 56.

Claim 57, for example, requires providing at least one of the receivers with at least one decryption key for the encrypted file, before transmitting the encrypted file. Taken together with claim 56, at least one receiver receives a key before the transmission of the file and at least one receiver receives a key after the transmission of the file. Paragraph [0069] is silent about whether the key is provided before or after the file. Applicant respectfully notes, however, that if the Examiner is of the opinion the Xu provides the keys before the file as seems to be implied from the rejection of claim 57, then Xu cannot be used to reject claim 56 and its dependents, which relate to providing keys after the file.

Claim 62, for example, requires that the at least one of the receivers provided with the decryption keys before transmitting the encrypted file are selected at least partially responsive to the number or percentage of acknowledgements provided by the receivers in a given period. This is not taught or suggested by Xu or Amelkar. As neither reference suggests the limitation of claim 57, neither reference needs to select which receivers receive the keys before and which receive the keys after the file. Of course, neither reference suggests using the number or percentage of acknowledgements in doing such a selection.

Independent claim 66

Claims 66 and 69-73 stand rejected under 35 USC 103(a) as being unpatentable over Xu et al. (US patent publication 2006/0166653) in view of Amlekar (US patent 7,289,500).

Claim 67 stands rejected under 35 USC 103(a) as being unpatentable over Xu et al. (US patent publication 2006/0166653) in view of Amlekar (US patent 7,289,500) and further in view of Aoki (US patent 6,563,822).

Claim 68 stands rejected under 35 USC 103(a) as being unpatentable over Xu et al. (US patent publication 2006/0166653) in view of Amlekar (US patent 7,289,500) and further in view of Grube (US patent 5,361,402).

Applicant respectfully traverses the rejection and respectfully submits that the Examiner has not established a *prima facie* case of obviousness, as at least one limitation of claim 66 is not taught by Xu or Amelkar.

Claim 66 requires estimating one or more transmission parameter values required to achieve, on the average, a reception rate which allows less than 100% of the receivers to which the multicast data is directed to reconstruct the data file from the multicast transmission.

This is not taught or suggested by Xu. Applicant respectfully submits that the flag holders mentioned in paragraph [0063] have nothing to do with the reception rate. The flag holders are used to help the transmitter determine whether there are receivers in the cell and hence whether transmission in the cell is required. This has nothing to do with purposefully selecting transmission parameters which will cause some of the receivers not to be able to reconstruct the data file, as required by claim 66.

The dependent claims are patentable at least because they depend on patentable independent claims. Nonetheless, at least some of the dependent claims add patentability over independent claim 66.

Claim 68, for example, requires selecting a transmission power required to achieve, on the average, a reception rate which allows less than 100% of the receivers to which the multicast data is directed to reconstruct the data file from the multicast transmission. The Examiner referred to Grube as describing analyzing ERP which may vary from time to time. The Examiner, however, did not show any teaching in Grube that the ERP is set to allow on the average, a reception rate which allows less than 100% of the receivers to which the multicast data is directed to reconstruct the data file from the multicast transmission. Applicant respectfully submits that Grube is directed at solving problems of degradation, the opposite of the requirement of claim 68.

Claim 69, for example, requires selecting a FEC redundancy level to achieve, on the average, a reception rate which allows less than 100% of the receivers to which the multicast data is directed to reconstruct the data file from the multicast transmission. Amelkar suggests using a FEC to reduce the number of retransmissions by alleviating some portion of the data packet loss (col. 6, lines 3-7). Amelkar does not relate to the FEC redundancy level and does not teach or suggest using a FEC redundancy level as required by claim 69.

Independent claim 79

Claims 79-80 stand rejected under 35 USC 103(a) as being unpatentable over Xu et al. (US patent publication 2006/0166653) in view of Shao et al. (US patent 7,093,028).

Claims 81-82 and 99 stand rejected under 35 USC 103(a) as being unpatentable over Xu et al. (US patent publication 2006/0166653) in view of Shao et al. (US patent 7,093,028) and further in view of Amlekar (US patent 7,289,500).

Applicant respectfully traverses the rejection and respectfully submits that the Examiner has not established a *prima facie* case of obviousness, as at least one limitation of claim 79 is not taught by Xu or Shao.

Claim 79 requires base stations having different bandwidth amounts for multicast transmission, dropping data so that the data can be transmitted by each of the base stations on its respective allocated bandwidth and transmitting the non-dropped data substantially synchronously.

The system of Shao does not relate to multicast by base stations, but rather to multicast in an IP network (claim 24). In fact, applicant could not find the term base station in Shao at all. The base station environment is totally different from the IP environment. In the IP network, the data is transmitted from a single source and propagates through the network. A node that drops data due to congestion cannot transmit other data instead of the data dropped, in a manner which interferes

with synchronous transmission to all nodes, because the rate of supplying the data is set by the server. In contrast, the base stations each time their transmission on their own independently of the others and synchronization requires special acts. Therefore, it would not be obvious to combine the teachings of Xu and Shao.

Furthermore, in Shao, the non-dropped data is not transmitted substantially synchronously, as different nodes suffer from different levels of congestion (which not always require dropping of data).

The dependent claims are patentable at least because they depend on patentable independent claims.

Independent claim 88

Claim 88 stands rejected under 35 USC 103(a) as being unpatentable over Xu et al. (US patent publication 2006/0166653) in view of Amlekar (US patent 7,289,500).

Applicant respectfully traverses the rejection and respectfully submits that the Examiner has not established a *prima facie* case of obviousness, as at least one limitation of claim 88 is not taught by Xu or Amelkar.

Claim 88 requires a controller adapted to generate a notification on an upcoming multicast transmission responsive to a received file, to provide the notification through the output interface for transmission and to provide the received file for transmission, without receiving acknowledgements from the receivers on whether they received the notification.

As acknowledged by the Examiner, Xu does not teach transmitting notifications without receiving acknowledgements. As to Amelkar, the Examiner referred to col. 2, line 37. This paragraph of Amelkar, however, relates to acknowledgement of reception of the file and not acknowledgement of the notification. These issues are totally different. A mobile station that is known to have received the notification will surely receive at least part of the file and therefore if it does not request retransmission of parts of the file it can be assumed that it received the entire file, as stated by Amelkar on col. 3, lines 37-40. But if the mobile station did not receive the notification on the multicast transmission, it may not have received any data at all as it will not know about the multicast channel and/or time and will not tune to receive the multicast.

Independent claim 89

Claims 89-90 stand rejected under 35 USC 103(a) as being unpatentable over Xu et al. (US patent publication 2006/0166653) in view of Cai et al. (US patent publication 2005/0030966).

Applicant respectfully traverses the rejection and respectfully submits that the Examiner has not established a *prima facie* case of obviousness, as at least one limitation of claim 89 is not taught by Xu or Cai.

Claim 89 requires a processor adapted to tune the receiver to receive data on a plurality of multicast channels and to combine the data received on the plurality of channels into a single multimedia file.

In contrast, Cai receives MBMS sessions which each relates to a separate aspect of the event, such as a video clip or text concerning of each of multiple goals. It is clear therefore that each session relates to a separate file.

The dependent claims are patentable at least because they depend on patentable independent claims.

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Conclusion

Applicants respectfully submit that in view of the above arguments the claims are allowable. Favorable reconsideration is respectfully requested, and allowance of the application is respectfully awaited.

Should the Examiner have any questions, comments or suggestions, or should issues remain, the Examiner is respectfully requested to contact the undersigned by telephone for a prompt and satisfactory resolution.

Respectfully submitted,
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